



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0514; Directorate Identifier 2012-SW-068-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Sikorsky Aircraft Corporation (Sikorsky) Model**

**Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for Sikorsky Model S-76A, B, and C helicopters to require certain inspections of each spindle cuff assembly or blade fold cuff assembly for a crack. If there is a crack, this proposed AD would require replacing the cracked part. If there is no crack, this AD would require applying white paint to the inspection area to enhance the existing inspection procedure. This proposed AD is prompted by the discovery of cracks in the spindle cuffs. The proposed actions are intended to prevent failure of a spindle cuff assembly or blade fold cuff assembly, loss of a rotor blade, and subsequent loss of control of the helicopter.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <http://www.regulations.gov>. Follow the online instructions for sending your comments electronically.

- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed AD, contact Sikorsky Aircraft Corporation, Attn: Manager, Commercial Technical Support, mailstop s581a, 6900 Main Street, Stratford, CT 06614; telephone (800) 562-4409; email [tsslibrary@sikorsky.com](mailto:tsslibrary@sikorsky.com); or at <http://www.sikorsky.com>.<http://www.eurocopter.com/techpub>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**FOR FURTHER INFORMATION CONTACT:** Nicholas Faust, Aviation Safety Engineer, Boston Aircraft Certification Office, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (781) 238-7763; email [nicholas.faust@faa.gov](mailto:nicholas.faust@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

We invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, we will consider all comments we receive on or before the closing date for comments. We will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. We may change this proposal in light of the comments we receive.

### **Discussion**

We propose to adopt a new AD for Sikorsky Model S-76A, B, and C helicopters. This proposed AD would require, depending on the hours time-in-service (TIS) of each part, either a one-time nondestructive inspection (NDI) or a visual inspection of each spindle cuff assembly or blade fold cuff assembly for a crack. If there is a crack, this proposed AD would require replacing the cracked part. If there is no crack, this proposed AD would require applying white paint to a portion of each spindle cuff assembly or

blade fold cuff assembly lower cuff plate to enhance the existing inspection procedure. This proposed AD is prompted by the discovery of five cracked spindle cuffs found during aircraft overhaul. The proposed actions are intended to prevent failure of a spindle cuff assembly or blade fold cuff assembly, loss of a rotor blade, and subsequent loss of control of the helicopter.

#### **FAA's Determination**

We are proposing this AD because we evaluated all known relevant information and determined that an unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs.

#### **Related Service Information**

Sikorsky issued S-76 Alert Service Bulletin ASB 76-65-67A, Revision A, dated July 18, 2012 (ASB), which specifies performing an NDI of the upper and lower cuff plate on each spindle cuff assembly or blade fold cuff assembly for a crack, either by eddy current, fluorescent penetrant, or ultrasonic inspection. If a crack indication is detected and not verified, the ASB specifies performing a different NDI to verify a crack. If there is a crack, the ASB specifies removing the spindle cuff assembly or blade fold cuff assembly from service. If a crack cannot be verified, the ASB specifies contacting Sikorsky for further instruction. Finally, if no crack is found, the ASB specifies applying white paint to a portion of the spindle cuff assembly or blade fold cuff assembly lower cuff plate to enhance the existing inspection procedure.

## **Proposed AD Requirements**

This proposed AD would require within 150 hours TIS:

- For each spindle cuff assembly or blade cuff assembly with 1,900 or more hours TIS, conducting an NDI by a qualified inspector by following specified portions of the ASB.

- For each spindle cuff assembly or blade cuff assembly with less than 1,900 hours TIS, visually inspecting each white paint application area for a crack by using a 5x or higher power magnifying glass.

- If there is a crack, before further flight, replacing each cracked spindle cuff assembly or cracked blade fold cuff assembly with an airworthy assembly.

- If there is no crack, applying white paint by following specified portions of the ASB.

This proposed AD also prohibits installing an affected spindle cuff assembly or blade cuff fold assembly on any helicopter unless it has been inspected in accordance with the requirements of this AD.

## **Differences between this Proposed AD and the Service Information**

The ASB specifies contacting the manufacturer if suspect cracks are not confirmed in the spindle cuff assembly or blade fold cuff assembly; this proposed AD would not require contacting the manufacturer. This proposed AD applies to spindle cuff assembly, part number (P/N) 76102-08001-043, which was inadvertently omitted in the ASB. The manufacturer has stated that they will issue an ASB in the future that will also apply to this spindle cuff assembly. The ASB applies to spare parts; this proposed AD does not.

## **Costs of Compliance**

We estimate that this proposed AD would affect 181 helicopters of U.S. Registry.

We estimate that operators may incur the following costs in order to comply with this AD, based on an average labor cost of \$85 per work hour: It would take 2.5 work hours to do an NDI and 2 work hours to apply the white paint. It would cost \$15 in materials for the paint for each helicopter. Based on these estimates, it would cost a total of \$398 per helicopter and \$72,038 for the fleet.

If it is necessary to replace a spindle cuff assembly or a blade cuff assembly, it would take 2.5 work hours and an estimated parts cost of \$54,000, for a total cost of \$54,212 for each helicopter.

## **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**SIKORSKY AIRCRAFT CORPORATION:** Docket No. FAA-2013-0514; Directorate Identifier 2012-SW-068-AD.

**(a) Applicability.**

This AD applies to Model S-76A, S-76B, and S-76C helicopters with a serial number up to and including 760822 and with a spindle cuff assembly, part number (P/N) 76102-08001-043, -045 or -046, or a blade fold cuff assembly, P/N 76150-09601-041, installed, certificated in any category.

**(b) Unsafe Condition.**

This AD defines the unsafe condition as a crack in a spindle cuff assembly or blade fold cuff assembly. This condition could result in failure of a spindle cuff assembly or blade fold cuff assembly, loss of a rotor blade, and subsequent loss of control of the helicopter.

**(c) Compliance.**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(d) Required Actions.**

Within 150 hours time-in-service (TIS):

(1) For each spindle cuff assembly or blade cuff assembly with 1,900 or more hours TIS, conduct a nondestructive (NDI) inspection by following the Accomplishment



Instructions, paragraph 3.B., of Sikorsky S-76 Alert Service Bulletin ASB 76-65-67A, Revision A, dated July 18, 2012 (ASB), except this AD does not require you to contact Sikorsky Aircraft Corporation. This inspection must be done by a level 2 or higher technician with National Aerospace Standard 410 or equivalent certification.

(2) For each spindle cuff assembly or blade cuff assembly with less than 1,900 hours TIS, visually inspect the area indicated in Figure 4 of the ASB as “white paint application area” for a crack by using a 5x or higher power magnifying glass.

(3) If there is a crack, before further flight, replace the cracked part.

(4) If there is no crack, apply white paint by following the Accomplishment Instructions, paragraph 3.D., of the ASB.

(5) Do not install an affected spindle cuff assembly or blade fold cuff assembly on any helicopter unless it has been inspected in accordance with paragraphs (d)(1) through (d)(4) of this AD.

**(e) Special flight permit.**

Special flight permits will not be issued.

**(f) Alternative Methods of Compliance (AMOC).**

(1) The Manager, Boston Aircraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Nicholas Faust, Aviation Safety Engineer, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (781) 238-7763; email [nicholas.faust@faa.gov](mailto:nicholas.faust@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or

certificate holding district office before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information.**

For service information identified in this AD, contact Sikorsky Aircraft Corporation, Attn: Manager, Commercial Technical Support, mailstop s581a, 6900 Main Street, Stratford, CT 06614; telephone (800) 562-4409; email [tsslibrary@sikorsky.com](mailto:tsslibrary@sikorsky.com); or at <http://www.sikorsky.com>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**(h) Subject.**

Joint Aircraft Service Component (JASC) Code: 6220 Main Rotor Head.

Issued in Fort Worth, Texas, on June 12, 2013.

Kim Smith,

Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

[FR Doc. 2013-14699 Filed 06/19/2013 at 8:45 am; Publication Date: 06/20/2013]